



ICT sector and trade core indicators: classifications and concepts

Capacity Building Workshop on Information Society
Statistics: Infrastructure, Household and other
Indicators

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Introduction

- This presentation is based on the work of the *Partnership on Measuring ICT for Development...*
 - ...leading up to the publication in 2005 of *Core ICT indicators*
 - plus work by the OECD on information economy classifications since then.
- It discusses classifications and concepts associated with the core indicators on the ICT sector and trade in ICT goods.

ICT sector indicators

- Indicator ICT1
 - Proportion of total **business sector workforce** involved in the **ICT sector**.
- Indicator ICT2
 - **Value added** in the **ICT sector** (as a percentage of total **business sector** value added).
- We need to define the variables **workforce** and **value added**.
- We need to define the **ICT sector**...
- and the **total business sector**.

Definition of terms

- The variables, *workforce* and *value added* are usually calculated using data for the ICT and total business sector which are compatible with national accounts tables.
- The *total business sector* is also usually the definition used for national accounts. OECD suggests that the total business sector be defined in terms of industries ISIC10–74 (excluding 70) (Rev 3.1).
- The ICT sector is defined according to the OECD (WPIIS) definition, first released in 1998 and revised slightly in 2002. It was revised again in 2007 (ISIC Rev. 4).
- More information on these definitions is available in *Core ICT indicators*.

2002 definition of the ICT sector

- The 1998 and 2002 OECD ICT sector definitions are expressed in terms of the characteristics of its products
 - for manufacturing industries, the products (goods) of a candidate industry must fulfil the function of information processing and communication including transmission and display, **or** use electronic processing to detect, measure and/or record physical phenomena or control a physical process.
 - for service industries, the products (services) of a candidate industry must be intended to enable the function of information processing and communication by electronic means.

The 2002 OECD ICT sector definition (ISIC Rev. 3.1)

ICT manufacturing industries

- 3000 Manufacture of office, accounting and computing machinery
- 3130 Manufacture of insulated wire and cable
- 3210 Manufacture of electronic valves and tubes and other electronic components
- 3220 Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy
- 3230 Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods
- 3312 Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment
- 3313 Manufacture of industrial process control equipment

ICT service industries

- 5151 Wholesale of computers, computer peripheral equipment and software
- 5152 Wholesale of electronic and telecommunications parts and equipment
- 6420 Telecommunications
- 7123 Renting of office machinery and equipment (including computers)
- 72 Computer and related activities

2007 definition of the ICT sector

- The new (2007) definition differs from that of 2002:
 - products which “use electronic processing to detect, measure and/or record physical phenomena or control a physical process” are now excluded, thus narrowing the scope of the ICT sector
 - some categories are more ICT-specific in ISIC Rev. 4 (partly due to WPIIS involvement) => narrower scope.
- The 2007 definition of the ICT sector is “The production (goods and services) of a candidate industry must primarily be intended to fulfil or enable the function of information processing and communication by electronic means, including transmission and display.”

The 2007 OECD ICT sector definition (ISIC Rev. 4)

ICT manufacturing industries

- 2610 Manufacture of electronic components and boards
- 2620 Manufacture of computers and peripheral equipment
- 2630 Manufacture of communication equipment
- 2640 Manufacture of consumer electronics
- 2680 Manufacture of magnetic and optical media

ICT service industries

- 4651 Wholesale of computers, computer peripheral equipment and software
- 4652 Wholesale of electronic and telecommunications equipment and parts
- 5820 Software publishing
- 61 Telecommunications
- 62 Computer programming, consultancy and related activities
- 631 Data processing, hosting and related activities; Web portals
- 951 Repair of computers and communication equipment

ICT trade indicators

- Indicator ICT3
 - ICT goods imports as a percentage of total imports.
- Indicator ICT4
 - ICT goods exports as a percentage of total exports.
- We need to define ICT goods.
- We need some conceptual framework for imports and exports data.

Trade statistics

- ICT3 and ICT4 normally come from official trade statistics which are brought together for most countries in the UNSD's COMTRADE database.
- For international comparability purposes, the indicators are usually compiled directly from the UN's COMTRADE database.
- Metadata characteristics of these indicators include the definition of ICT goods and the sources and concepts concerning international trade statistics more generally (classifications, valuation, currency, compilation method etc).

Definitions of ICT goods

- The OECD's WPIIS agreed on a definition of ICT goods in 2003 (based on the six-digit WCO Harmonized System classification used for trade statistics).
- The goods classification is currently being revised and will be based on the 2007 UNSD Central Product Classification (CPC Ver. 2).
- A HS 2007 version of the 2007 ICT goods classification will be used for compiling indicators ICT3 and ICT4.

ICT goods classification, 2003

- The definition of the 2003 OECD ICT goods classification is:
 - ICT goods must either be intended to fulfil the function of information processing and communication by electronic means, including transmission and display, **or**
 - Use electronic processing to detect, measure and/or record physical phenomena, or to control a physical process.
- The 2003 definition of ICT goods will be in place until the CPC Ver. 2 and the 2007 ICT goods classification are finalised – and presumably a reasonable number of countries are using the 2007 HS.

ICT goods classification, 2003

- It is based on the six-digit *Harmonized System* classification for trade statistics.
- It is expressed in terms of both the 1996 and 2002 HS.
- Broad groupings are
 - telecommunications equipment
 - computer and related equipment
 - electronic components
 - audio and video equipment
 - other ICT goods.

Changes in product classifications

- Earlier this year, OECD member countries agreed on an ICT services classification based on the UNSD's 2007 Central Product Classification (CPC Ver. 2).
- Work is currently underway to develop a revised goods classification, based on the CPC Ver. 2.
- In the process, the services classification is likely to change a little and the result will be a single ICT products classification.
- The revised ICT products classification is expected to be released by the end of 2007 or early 2008.

Other developments in information economy classifications

- Earlier this year, the OECD released a definition of a *Content and media* sector, based on ISIC Rev. 4. It was developed with the revised ICT sector definition.
- The classification is based on Section J, *Information and communication*, of ISIC Rev. 4 (except for the industries which are in the ICT sector).
- A *Content and media* product classification is currently in development.
- The same OECD expert group is responsible for all the information economy classifications
 - sectors and products
 - *ICT* and *Content and media*.

The 2007 OECD Content and media sector definition (ISIC Rev. 4)

Publishing of books, periodicals and other publishing activities

5811 Book publishing

5812 Publishing of directories and mailing lists

5813 Publishing of newspapers, journals and periodicals

5819 Other publishing activities

Motion picture, video and television programme activities

5911 Motion picture, video and television programme production activities

5912 Motion picture, video and television programme post-production activities

5913 Motion picture, video and television programme distribution activities

5914 Motion picture projection activities

Sound recording and music publishing activities

5920 Sound recording and music publishing activities

Programming and broadcasting activities

6010 Radio broadcasting

6020 Television programming and broadcasting activities

Other information service activities

6391 News agency activities

6392 Other information service activities n.e.c.

Thank you

- Please feel free to send me any comments on issues raised in the presentation.
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